



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/761,865 | 01/21/2004 | Philip Koneda | 81044248 | 3149 |
| 33066 | 7590 | 01/25/2006 | EXAMINER | |
| RICHARD M. SHARKANSKY PO BOX 557 MASHPEE, MA 02649 | | | CHANG, CHING | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3748 | |
| DATE MAILED: 01/25/2006 | | | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/761,865

Applicant(s)

KONEDA ET AL.

Examiner

Ching Chang

Art Unit

3748

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, and 9-12 is/are rejected.
- 7) ☒ Claim(s) 5-8 and 13-16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This Office Action is in response to the amendment filed on 04/20/2005. New claims 9-16 are added as requested.

Claim Objections

1. Claims 1-3, 9-11, and 16 are objected to because of the following informalities:
 - " the electromagnetic " in both claims 1 and 9 should be --the electromagnet--.
 - " claim 12 " in claim 16 should be -- claim 15 --.

Appropriate corrections are required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. ***Claims 1-3, and 9-11 are rejected under 35 U.S.C. 102(e) as being anticipated by Kodama (US Patent Application Publication US 2003/0160197 A1).***

Kodama discloses an electronic valve actuator (See Figs. 1A-1C, 6A-6C), comprising: an electromagnet (12, 13); an armature (14, 14a) disposed adjacent to the electromagnet; a fluid-containing chamber (15; 65b) having: a first piston (17; 67) providing a first wall portion of the chamber and a second piston (11b; part of 61), spaced from the first piston, providing a second wall portion of the chamber, the first

wall portion having a greater surface area (17c; also See Figs. 6B-6C) than the surface area (11c) of the second wall portion; wherein the first piston is coupled to the armature and the second piston is coupled to a valve (11; 61); and wherein motion of the first piston is coupled to the second piston through fluid in the fluid-containing chamber; wherein the valve is a valve of an internal combustion engine; wherein the chamber has therein motor oil for the engine (See Paragraph [0115]).

4. *Claims 4, and 12 are rejected under 35 U.S.C. 102(e) as being anticipated by Kodama (US Patent Application Publication US 2003/0160197 A1).*

Kodama discloses an electronic valve actuator (See Figs. 1A-1C, 6A-6C), comprising: a pair of electromagnets (12, 13); an armature (14, 14a) disposed in a magnetic field produced by the pair of electromagnets; a fluid-containing chamber (15; 65b) having: a first piston (17; 67) providing a first wall portion of the chamber; and a second piston (11b; part of 61) spaced from the first piston, providing a second wall portion of the chamber, the first wall portion having a greater surface area (17c; also See Figs. 6B-6C) than the surface area (11c) of the second wall portion; wherein the first piston is coupled to the armature and the second piston is coupled to a valve (11; 61); and wherein motion of the first piston is coupled to the second piston through fluid in the fluid-containing chamber; a pair of springs (unnumbered in Figs. 1A-1C), a first one of the pair of springs is disposed to compress upon activation of a first one of the pair of electromagnets while a second one of such pair of springs is disposed to expand upon such activation of the first one of the pair of electromagnets, the first one of the springs being held in compression until deactivation of the first one of the

electromagnets, the second one of the pair of springs being disposed to compress after deactivation of the first one of the electromagnets and resulting expansion of the first one of the pair of springs while the first one of such pair of springs is disposed to thereby expand, the second one of the springs being held in compression until deactivation of the second one of the electromagnets (See Paragraphs [0070] – [0075], and [0103] – [0115]); wherein the valve is a valve of an internal combustion engine; wherein the chamber has therein motor oil for the engine (See Paragraph [0115]).

Allowable Subject Matter

5. Claims 5-8, and 13-16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

6. Applicants' arguments, filed on 04/20/2005, with respect to the rejection(s) of claim(s) 1-8 under 35 U.S.C. 102(b) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Kodama (US Patent Pub '197).

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Ray (Us Patent 3,108,777).

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ching Chang whose telephone number is (571)272-4857. The examiner can normally be reached on M-Th, 7:00 AM -5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Denion can be reached on (571)272-4859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patent Examiner

A handwritten signature in cursive script, appearing to read "Ching Chang".

Ching Chang